



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,207	01/22/2004	Masaya Oi	2018-835	2348
23117 7590 03/18/2008 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
VU, TUAN A				
ART UNIT		PAPER NUMBER		
2193				
MAIL DATE		DELIVERY MODE		
03/18/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/761,207

Applicant(s)

OI ET AL.

Examiner

Tuan A. Vu

Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to the Applicant's response filed 1/15/2008.

As indicated in Applicant's response, claims 1, 8-48 have been amended. Claims 1-48 are pending in the office action.

Specification and Claim Objections

2. The disclosure (including the Claims) is objected to because of the following informalities: The terminology referred to extensively as 'variations' does not appear to be proper usage according standard definition. *Variation* in commonly accepted definition, signifies a state or fact of being varied, or instance of varying or extent to which a thing varies, or a divergence from an average or common characteristics. Variation thus entails a changing state or instance that distinguishes a first state being common (or average/standard) to a second state that differed from that first state, in terms of a variant state, or slightly out of average instance thereof. 'Variation' used alone, as in the Disclosure, does not put forth the required scenario that one state is being varied or represents a varied instance of another state being more standard or common. The Specifications **and** the claim language recite 'variations' without any contextual details amounts to improper use of language, or inadequate syntax that fails to point out what object is being varied or what version represents a slightly different or modified version of a more common object, as analyzed above. Thus, the absolute language conveyed by the use of 'variations' as a stand-alone (context free concept) in the Specifications, fails to establish a reasonable and relative context (*variation* of what? with respect to what – i.e. for not specifying what variation this act of being varied amounts to) for specific data varying, hence is not putting forth the expected flow or degree of varying, or specific data slightly differing (from one

another) that a lexicography-proper 'variation' should normally include (e.g. variation of what, with respect to what).

For enabling prosecution of the case, the above misuse of the term 'variations' will be treated as *variations* of model, or variations of constituents making up that model.

Appropriate correction is required for all instances of (stand-alone) 'variations' in the Specifications (and the Claims).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The language revolving around the use of 'given model', 'certain specific parts' and 'certain model' is deemed incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: a implementation depiction that clearly establishes distinction between a (i) 'given model', (ii) a 'certain model', as well as the relationship between either (i) or (ii), with (iii) 'certain specific part' and (iv) 'selected variation' limitation.

The term "certain", as in 'certain specific parts' (cl. 1, line 8) and 'certain model' (cl. 1, line 10), is a relative term which renders these claimed entities indefinite. This relative qualifier "certain", in view of the context implicating a 'given model' and 'specific parts', is not reasonably defined by the claim; nor does the specification provide a standard for ascertaining its requisite

degree (e.g. *certain* with respect to what reference, or *uncertain* with respect to what criteria of certitude); and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention, absent any definite structural (and even functional) relationship between the elements (elements i, ii, iii, and iv). As claimed, a 'given model' (element i) entails having specific parts being specified (cl. 1, line 4), while a 'certain model' (element ii) is generated using (i), and based on both the 'selection information acquisition means', and a 'selected variation' (element iv - cl. 1, line 13). When all of which is recited without **clear relationship** (emphasis added) between this 'selected variation' and 'certain specific parts' from above, one would find hard to perceive how the 'certain specific parts' (element iii) is connected with the 'certain model' using the 'given model' or 'selected variation', nor is clear how any 'selected variation' (element iv) can help understand how 'certain specific parts' (element iii), given model (element i), and certain model (element ii) relate to one another in the rationale flowing from *plurality of variations* to 'information acquisition means' or 'selection information' and 'certain specific parts'. That is, missing is a relationship that would help put forth a cooperative context by which one of ordinary skill in the art can perceive that element (ii) in light of element (i), amounts to precise entity (free from relative degree in semantics) with *metes and bounds*, such that this entity (ii) fits meaningfully in the process involving element (iii) being selected as mentioned above using (emphasis added) 'selection information acquisition means', i.e. implicating element (iii) and probably element (iv). Claim 1 is therefore not enabling one of ordinary skill in the art to construe the true extend of the certain model in the recited context using the given model and the basis played by the 'information acquisition means' as analyzed from above. For the sake of prosecuting the case, there will be no patentable weight being given

to the qualifier 'certain', and no full merits would be imparted to the scenario about 'selected variation' based on elements (iii) or (iv), particularly in conjunction with the models recited as (i) and (ii).

Claims 2-7, 15-20 are also rejected for failing to remedy to the indefiniteness deficiency of the base claim as set forth above.

Claim 8 also recites (i) 'given model', (ii) a 'certain model', as well as what appears to be a lack relationship between either (i) or (ii), with (iii) 'certain specific part' and (iv) 'selected variation' limitation. Claim 8 fails to clarify how 'certain' is implemented in terms of its metes and bounds, and how 'certain specific parts' contribute to 'selected variation' in light of the generating of 'certain model' from a 'given model' as set forth above. Claim 8 is rejected for omitting structural relationship between (i) (ii) (iii) and (iv) and for not defining 'certain' in more compliant semantic definiteness. Claims 21-24 are also rejected for not remedying to claim 8.

Claims 9, and 25-28 are rejected because of the deficiency implicating indefiniteness between elements (i) (ii) (iii) and (iv), and the relative term 'certain' as analyzed above.

Claims 10, and 29-32 are rejected because of the deficiency implicating indefiniteness between elements (i) (ii) (iii) and (iv) as analyzed above.

Claims 11, and 33-36 are rejected because of the deficiency implicating the relative term 'certain' and indefiniteness between elements (i) (ii) (iii) and (iv) as analyzed above.

Claims 12, and 37-40 are rejected because of the deficiency implicating the relative term 'certain' and indefiniteness between elements (i) (ii) (iii) and (iv) as analyzed above.

Claims 13, and 41-44 are rejected because of the deficiency implicating the relative term 'certain' and indefiniteness between elements (i) (ii) (iii) and (iv) as analyzed above.

Claims 14, and 45-48 are rejected because of the deficiency implicating the relative term 'certain' and indefiniteness between elements (i) (ii) (iii) and (iv) as analyzed above.

5. Claims 1-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The terms 'variations' used extensively as a stand-alone concept in the claims without any context -- as explained above in the Specification Objections -- amounts to a lack of defining context by which one of ordinary skill would learn exactly how a object is a varied instance or variation (or instance thereof) from another object. The above misuse of 'variations' will be treated as *variations* of model, or variations of parts making up the model.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-5, 7-16, 19, 23, 27, 31, 35, 39, 43, and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Herbert Hanselmann, 'Automotive Control: From Concept to Experiment to Product', IEEE *International Symposium on Computer-Aided Control System Design*, Proceedings of September 1996; pp. 129-134(hereinafter Hanselmann).

As per claim 1, Hanselmann discloses a code generation apparatus to generate a source code using a given model covering a plurality of variations, the apparatus comprising:

model acquisition means for acquiring the given model (e.g. Step 1, Step 2, pg. 129, R col.; Fig. 4-5 – Note: model inherently reads on integrating therein of requirements such as automotive/regulation-based parts names, variables, attributes, or parametric data) having a plurality of specific parts, each specific part being specified by a part specifier, each specific part corresponding to at least one variation among the plurality of variations; (e.g. *Automotive control ... city-driving ... fuel efficiency... Regulations ... requirements ... Total Development Environment* – L column, pg. 129; Step 6, pg. 129; Fig. 4-5 – Note: requirements gathering to set up initial model and create Simulink blocks --with parameters -- therefrom reads on model specified by part specifier);

selection information acquisition means for acquiring selection information, from a source external to the code generation apparatus (e.g. drag-and-dropped onto the window - pg 132, 2nd para, R col – Note: inputting via user's mouse drag/drop reads on source external to the code generation apparatus), capable of indicating at least one of selection and deletion of a certain specific part (e.g. step 3-4; R col. pg. 129; Fig. 2, pg. 130) using the part specifier specifying the certain part (Note: Simulink drag-and-drop of simulator parameters in conjunction with initial model specification reads on selection/deletion using part specifier); and

deletion and generation means for generating the source code from a certain model (e.g. step 5, R col., pg. 129; Fig. 1, pg. 130; *step 2 and 3 may be repeated many times* – pg. 130, bottom L col.; bottom L, pg. 132 to top pg. 132, R column – Note: improving via readjusting of blocks in *Simulink* tool reads on reaching a more certain model than the initial or preliminary model – see step 6-8, pg. 129-130; backward arrows in Fig. 1), which is generated using the given model acquired by the model acquisition means based on the selection information

acquired (e.g. Step 1, Step 2, pg. 129, R col.; Fig. 4-5) by the selection information acquisition means, the certain model covering a selected variation selected from the plurality of variations and not covering a non-selected variation (Note: tool enabling selective enlisting of modeling blocks or constructs reads on reaching a certain model with selecting of only variations of modeling constructs at the expense of not keeping non-chosen constructs unnecessarily); and a machine readable storage medium for the storing the generated source code (e.g. Fig. 7, pg. 133).

As per claim 2, Hanselmann discloses wherein at least one part specifier includes a part specification block (e.g. Fig. 4-5 in light of step 1, step 2, step 4-6, pg. 129, L col.) which encloses the specific part of the given model (e.g. *Toyota* – section 3, The **Virtual ECU**, pg. 131 – Note: Simulink-based to address verification of requirements of parameters for Toyota’s ECU reads on part including a given model), and wherein the selection information acquisition means acquires the selection information indicating at least one of selection and deletion of the specific part using the part specification block (e.g. step 5, R col., pg. 129; Fig. 1, pg. 130; *step 2 and 3 may be repeated many times* – pg. 130, bottom L col. – Note: improving via readjusting of blocks in *Simulink* tool reads on selection/deletion to improve upon initial or preliminary model – see step 6-8, pg. 129-130; backward arrows in Fig. 1).

As per claim 3, Hanselmann discloses wherein at least one part specifier includes attribute information (e.g. parameters – Fig. 1; Fig. 2, 4, 5) that is included in the specific part of the given model.

As per claim 4, Hanselmann discloses:

correlative information acquisition means for acquiring correlative information indicating correlation (e.g. section 3, **RCP requirements, Virtual ECU**, pg. 130-131; Fig. 5; *Real-Time Interface, dSPACE hardware* – Fig. 1, pg. 130) between part specifiers respectively specifying the specific parts of the given model acquired by the model acquisition means and the selection information acquired by the selection information acquisition means (e.g. Fig. 3-5 – Note: prototyping or performing real-time Hw/Sw mapping based on requirements and hardware limitations and implementation constraints reads on correlating parts specifications and SIMULINK data blocks setting), wherein the deletion and generation means generates the source code (section 4, pg. 132) from the certain model that is generated using the given model acquired by the model acquisition means based on the selection information acquired by the selection information acquisition means and the correlative information acquired by the correlative information acquisition means (steps 5-7, pg. 130-131; *Parameters Tuning*, section 5, pg. 132-133).

As per claims 5, 7, Hanselmann discloses information about a model type (*Toyota ECU commercial microcontroller* – section 3, The **Virtual ECU**, pg. 131; *DEC Alpha AXP, TMS320C40* -section 6, pg. 133 – Note: Simulink-based to address verification of requirements of parameters for Toyota's ECU reads on part including a given model) relevant to the source code generated by the deletion and generation means (refer to claim 4); wherein the selection information includes information about an intended use (section 7, pg. 133; section 8, pg. 134 – Note: modeling and implementing test/prototyping using SIMULINK for a code simulating a ECU for Toyota or Chrysler reads on requirements to fulfill via test for ECU application) relevant to the source code generated by the deletion and generation means.

As per claim 8, Hanselmann discloses a computer program product on a computer readable medium for use in a code generation apparatus to generate a source code using a given model covering a plurality of variations, the computer program product comprising instructions for:

acquiring the given model (. Step 1, Step 2, pg. 129, R col.; Fig. 4-5) having a plurality of specific parts, each specific part being specified by a part specifier, each specific part corresponding to at least one variation among the plurality of variations; (e.g. *Automotive control ... city-driving ... fuel efficiency... Regulations ... requirements ... Total Development Environment* – L column, pg. 129; Step 6, pg. 129; Fig. 4-5);

acquiring selection information, from a source external to the code generation apparatus (e.g. drag-and-dropped onto the window - pg 132, 2nd para, R col), capable of indicating at least one of selection and deletion (e.g. step 3-4; R col. pg. 129; Fig. 2, pg. 130)of a certain specific part of the plurality of specific parts using the part specifier specifying the certain specific part; and

generating the source code (e.g. bottom L, pg. 132 to top pg. 132, R column) from a certain model, which is generated using the acquired given model (e.g. step 5, R col., pg. 129; Fig. 1, pg. 130) based on the acquired selection information, the certain model covering a selected variation selected from the plurality of variations and not covering a non-selected variation (Note: tool enabling selective enlisting of modeling blocks or constructs reads on reaching a certain model with selecting of only variations of modeling constructs at the expense of not keeping non-chosen constructs unnecessarily); and

storing the generated source code in a machine readable medium.

As per claim 9, Hanselmann discloses simulation apparatus (e.g. Fig. 4) for executing functions included in a certain model generated using a given model covering a plurality of variations, the apparatus comprising:

model acquisition means for acquiring the given model having a plurality of specific parts, each specific part being specified by a part specifier, each specific part corresponding to at least one variation among the plurality of variations;

selection information acquisition means for acquiring selection information, from a source external to the code generation apparatus (e.g. drag-and-dropped onto the window - pg 132, 2nd para, R col), capable of indicating at least one of selection and deletion of the specific part using the part specifier (see Fig. 2, pg. 130); and

deletion and generation means for executing (see *execution* - bottom L, pg. 132 to top pg. 132, R column; steps 5, 6 pg. 129) the functions included in the certain model that is generated using the given model acquired by the model acquisition means based on the selection information acquired by the selection information acquisition means; , the certain model covering a selected variation selected from the plurality of variations and not covering a non-selected variation (Note: tool enabling selective enlisting of modeling blocks or constructs reads on reaching a certain model with selecting of only variations of modeling constructs at the expense of not keeping non-chosen constructs unnecessarily); and

a machine readable medium for storing the generated certain model;

all of which limitations having been addressed in claim 1 or 8.

As per claim 10, Hanselmann discloses a computer program product on a computer readable medium for use in a simulation apparatus for executing functions (bottom L, pg. 132 to top pg. 132, R column; steps 5, 6 pg. 129) included in a certain model generated using a given model covering a plurality of variations, the computer program product comprising instructions for:

acquiring the given model having a plurality of specific parts, each specific part being specified by a part specifier, each specific part corresponding to at least one variation among the plurality of variations;;

acquiring selection information, from a source external to the code generation apparatus, capable of indicating at least one of selection and deletion of the specific part using the part specifier; and

executing the functions included in the certain model that is generated using the acquired given model based on the acquired selection information; , the certain model covering a selected variation selected from the plurality of variations and not covering a non-selected variation (Note: tool enabling selective enlisting of modeling blocks or constructs reads on reaching a certain model with selecting of only variations of modeling constructs at the expense of not keeping non-chosen constructs unnecessarily);

all of which limitations having been addressed in claim 1 or 9.

As per claim 11, Hanselmann discloses a model generation apparatus to generate a certain model using a given model covering a plurality of variations, comprising:

model acquisition means (for acquiring the given model ... specified by a part specifier, each specific part corresponding to at least one variation among the plurality of variations;);

selection information acquisition means (for acquiring selection information, from a source external to ... selection and deletion ... using the part specifier); and

deletion and generation means for (generating the certain model ...acquired by the ... based on the ... selection information acquisition means), the certain model covering a selected variation selected from the plurality of variations and not covering a non-selected variation (Note: tool enabling selective enlisting of modeling blocks or constructs reads on reaching a certain model with selecting of only variations of modeling constructs at the expense of not keeping non-chosen constructs unnecessarily); and

a machine readable medium for storing the generated certain model;

all of which having been addressed in claim 1.

As per claim 12, Hanselmann discloses a computer program product on a computer readable medium for use in a model generation apparatus to generate a certain model using a given model, the computer program product comprising instructions for:

acquiring (the given model ... by a part specifier, each specific part corresponding to at least one variation among the plurality of variations;);

acquiring (selection information, , from a source external to ... selection and deletion ... using the part specifier); and

generating the certain model ...using the acquired given model ... selection information , the certain model covering a selected variation selected from the plurality of variations and not

covering a non-selected variation (Note: tool enabling selective enlisting of modeling blocks or constructs reads on reaching a certain model with selecting of only variations of modeling constructs at the expense of not keeping non-chosen constructs unnecessarily);

of which limitations having been addressed in claim 1.

As per claim 13, refer to the computer product of claim 8.

As per claim 14, Hanselmann discloses code generation apparatus to generate a source code using a given model covering a plurality of variations, comprising: model acquisition means for acquiring the given model heaving a plurality of specific parts, wherein each of the plurality of parts included in the given model is specified by each of a plurality of part specifiers, each specific part corresponding to at least one variation among the plurality of variations; (Fig. 2, 4, 5 – Note: GUI with file/toobar/clipboard for part/attributes specifying via panels for a SIMULINK or dSPACE instances build reads on plurality of files, clipboard, or panel or part specifier- opened for a given project, each being part of a plurality of part specifiers, the validation of which being recorded as lookup tables – see pg. 134, top);

selection information acquisition means for acquiring selection information, , from a source external to the code generation apparatus, indicating at least one of selection and deletion of a given specific part using a given part specifier that specifies the given specific part (refer to claim 1); and

deletion and generation means for generating the source code from a certain model that is generated using the given model acquired by the model acquisition means based on the selection information acquired by the selection information acquisition means , the certain model covering

a selected variation selected from the plurality of variations and not covering a non-selected variation (Note: tool enabling selective enlisting of modeling blocks or constructs reads on reaching a certain model with selecting of only variations of modeling constructs at the expense of not keeping non-chosen constructs unnecessarily); and

a machine readable medium for storing the generated source code (refer to claim 1).

As per claims 15, 16, and 19, based on the model and the industrial applicability of Simulink (e.g. automobile industry via Fig. 1, 2, pg. 129-130; Introduction, pg. 129; Fig. 4-5, pg. 131-132), Hanselmann does disclose wherein the variations are functions exclusive to each other in the generated certain model; wherein the variations of the family are types different from each other; wherein the variations are intended uses which are different from each other (Note: a Simulink model when implemented in a industrial application inherently include specific intended use per model-- like ECU for each car model, applying to different type of industrial applications, wherein each application being modeled and implemented comprise functions exclusive to the model made for the a build or prototyping).

As per claims 23, 27, 31, 35, 39, 43 and 47, refer to claim 19.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 6, 17-18, 20-22, 24-26, 28-30, 32-34, 36-38, 40-42, 44-46, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herbert Hanselmann, 'Automotive Control: From Concept to Experiment to Product', and further in view of Admitted Prior Art (see BACKGROUND of invention, pg. 2-3- hereinafter APA).

As per claim 6, Hanselmann does not explicitly disclose that the selection information includes information about a destination country relevant to the source code generated by the deletion and generation means. However, the automotive concept for building specific controller in compliance with the requirements or regulations of a environment or geographical settings targeted for the car is strongly suggested (see section: Introduction, pg. 129; section 7-8, pg. 133-134). Geographical requirements such as destination country where the automobile is to be delivered is further mentioned in APA (see Specifications: pg. 2; top para pg. 3) according to which Simulink (such as taught by Hanselmann) can support modeling and testing of manufactured engine destined for Japan, US or Europe. Based on the above teaching implied by the regulations considered in car making in regard to a geographical location target, it would have been obvious for one of ordinary skill in the art at the time the invention was made to implement the requirements by Hanselmann so that selection information includes information about a destination country in association with the code generating based on Hanselmann's Total Development Environment tool because this knowledge of the target country would dictate the regulations information specific to the code needed to implement appropriate automobile functionality in that respect and successfully select and validate the parameters implicated by the requirements for such country (see APA) based upon the above automotive regulations.

As per claims 17-18, 20, Hanselmann does not explicitly disclose wherein the variations of the family are types of engines; but based on the rationale as set forth for addressing the *intended use* and *specific type* using Hanselman's automotive application in addressing claims 16, 19 from above in light of APA, the above limitations would also have been obvious because each country for which Hanselmann's car model is intended for would have regulations or domestic laws specific for such country and a targeted car model for that country has to be modeled compliant to a given engine type to suit that country's environment and laws, as set forth in claim 6.

As per claims 21, 22, 24, refer to rationale as set forth in claims 17-18, 20.

As per claims 25, 26, 28, refer to claims 17-18, 20.

As per claims 29, 30, 32, refer to claims 17-18, 20.

As per claims 33, 34, 36, refer to claims 17-18, 20.

As per claims 37, 38, 40, refer to claims 17-18, 20.

As per claims 41, 42, 44, refer to claims 17-18, 20.

As per claims 45, 46, 48, refer to claims 17-18, 20.

Response to Arguments

10. Applicant's arguments filed 1/15/08 have been fully considered but they are not persuasive. Following are the Examiner's observation in regard thereto.

USC § 102(b) Rejection:

(A) Applicants have submitted that (for claim 1) Hanselmann fails to disclose 'acquiring selection ... from a source external to ... capable of indicating selection and deletion ... certain specific part' ... generating the source code from a certain model ... using the given model

acquired by the acquisition means ... based on ... selection information ... by the selection information acquisition means ...'; and that example of given model and certain model is given by way of V6, V8, V16 in diagram from Figures 2, 3, 6 of the Disclosure. In response, the claim lacks structural and functional relationship between 'selected variation' and 'certain specific parts' respective to *model acquisition* and *selection acquisition* means, and this is not effectively put forth the selecting of (by the selection information acquisition means) *specific parts* from a 'given model' to yield a 'certain model' as exemplified by Applicants introducing of family of car engine as proffered above. Nor does the claim provide definiteness between 'certain specific parts', 'certain model' in order to convey how 'certain' state of any model or underlying parts is achieved when compared to just 'given model' or just 'specific parts'. The largely indefinite teaching from the claimed features and insufficient relationship to support the flow of interaction between claimed entities has been identified in the USC 112 Rejection. When no relationship is perceived from 'selected variation' in relation to the given model or the selection acquisition means, any concrete level of achieving a 'certain model' is also in doubt. Thus, the portion emphasized in the Applicants' argument (i.e. '*a certain model, which is generated using the given model ... acquired by the acquisition means ... based on ... selection information ... by the selection information acquisition means*') is deemed not having clear and enabling support in a fashion as to dictate how such claimed portion should be addressed and/or given patentable weight. The claim language has to be sufficiently clear as to establish reasonable teaching enabling one to make use of the invention which is not the case based on the USC 112 Rejection. Moreover, the claim can be interpreted broadly in light of the Specifications. That is, broad interpretation given a most reasonable semantic merits of what is being claimed **does not signify**

that the Specifications can be read into the claim or replacing the claim. Applicants' attempt to introduce a part of the Disclosure to **represent** a substantial claim language portion (see Appl. Rmrks, pg. 15, bottom, pg. 16 top: e.g. *plurality of variations V6, V8 and 16 ... covering selected variation V6 ... variation V8, exclude non-selected variations V6 and 16*) cannot be construed as a prima facie way to show (to one of ordinary skill prosecuting the claims) how the claim language distinguishes over the prior art; and the Applicants appears to employ this claim language-replacing technique for justifying that Hanselmann does not anticipate the language of the claim. The claim language is marred by indefiniteness, and by lack of reasonable structural relationship between the elements being claimed, rendering the above Applicants' excerpt from the Disclosure non-commensurate with how the Office Action interprets the claims. The argument is mere assertion for patentability and is largely deemed insufficient to overcome the rejection.

(B) Applicants have submitted that Hanselmann does not teach generation a 'certain' model from a 'given' model to cover a selected variation and not covering non-selected variation (Appl. Rmrks, pg. 16, bottom, pg. 17, top). The term 'variation' alone triggers a non-definite teaching and in view of the amount of indefiniteness conveyed throughout the claim in terms of **relative term** and omission of reasonable structural relationship, as set forth in the 356 USC § 112/2nd paragraph Rejection and Specifications Objections, the above argument is not deemed convincing and should be referred to section A above, because Applicants appear to remedy to the unclear language of the claim by importing some external teaching fetched from the Specifications.

(C) Applicants have submitted that Hanselmann does not disclose 'part specifier' as recited in claim 1 (Appl. Rmrks, pg. 17, middle). Actually, the so-recited 'part specifier' is expressed as 'each specific part being specified by a part specifier' and 'using a part specifier specifying the certain specific part' from claim 1. Hence, the weight properly given to this 'part specifier' amounts to a functionality that specifies either a specific part, or a 'certain specific part'. The USC 112/2nd Rejection has made it plenty clear the 'certain' is not definite a teaching and would not be given any weight; hence, the part specifier can be interpreted as a functionality included in the apparatus of claim 1 as a software entity that specifies a part being selected or specified (in terms of part being added or deleted) by an external means. Hanselmann' tool with window interface to capture event caused by an user that use from outside the apparatus, manipulate a mouse to add or delete icons represented on the viewer is construed as such entity that indicate at least one selection coming from a source being an external user. The claim does not provide any definition to distinguish 'part' from any part of the model in Handelmann's hardware design; e.g. is it a industrial hardware/automobile part or software represented part? As to the term 'part' viewed in the context of a plant's simulation tool with modeling, Handelmann's selecting (via drag-and-drop) of objects or symbols to represent a simulated engine (see Handelmann, Fig. 2) necessarily signifies a 'part' as any part or objects being selected during the design for contributing to the control engine or structure for said hardware design. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the reference.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (571) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis Bullock can be reached on (571)272-3759.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 (for non-official correspondence - please consult Examiner before using) or 571-273-8300 (for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tuan A Vu/

Primary Examiner, Art Unit 2193

March 11, 2008

Application Number**Application/Control No.**

10/761,207

Examiner

Tuan A. Vu

**Applicant(s)/Patent under
Reexamination**

OI ET AL.

Art Unit

2193